CONTENTS

Volume 54 Number 1 1979

C. Lännergren
Buoyancy of Natural Populations of Marine Phytoplankton 1

S. Leutenegger, H. J. Hansen
Ultrastructural and Radiotracer Studies of Pore Function in Foraminifera 11

J. G. Parker
Toxic Effects of Heavy Metals upon Cultures of *Uronema marinum* (Ciliophora: Uronematidae) 17

S. G. Nelson, M. A. Simmons, A. W. Knight
Ammonia Excretion by the Benthic Estuarine Shrimp *Crangon franciscorum* (Crustacea: Crangonidae) in Relation to Diet 25

J. Caperon, D. Schell, J. Hirota, E. Laws
Ammonium Excretion Rates in Kaneohe Bay, Hawaii, Measured by a ^{15}N Isotope Dilution Technique 33

R. Zimmerman, R. Gibson, J. Harrington
Herbivory and Detritivory Among Gammaridean Amphipods from a Florida Seagrass Community 41

D. F. Smith, N. C. Bulleid, R. Campbell, H. W. Higgins, F. Rowe, D. J. Tranter, H. Tranter
Marine Food-Web Analysis: An Experimental Study of Demersal Zooplankton Using Isotopically Labelled Prey Species 49

R. J. Feller, G. L. Taghon, E. D. Gallagher, G. E. Kenny, P. A. Jumars
Immunological Methods for Food Web Analysis in a Soft-Bottom Benthic Community 61

D. Feigenbaum
Daily Ration and Specific Daily Ration of the Chaetognath *Sagitta enflata* 75

R. S. S. Wu, C. D. Levings
Energy Flow and Population Dynamics of the Barnacle *Balanus glandula* 83

S. F. Rainer, A. M. Ivanovici, V. A. Wadley
Effect of Reduced Salinity on Adenylate Energy Charge in Three Estuarine Molluscs 91

Volume 54 Number 2 1979

E. L. Mills, R. O. Fournier
Fish Production and the Marine Ecosystems of the Scotian Shelf, Eastern Canada 101

D. W. Rimmer, B. F. Phillips
Diurnal Migration and Vertical Distribution of Phyllosoma Larvae of the Western Rock Lobster *Panulirus cygnus* 109

P. C. Rothlisberg
Combined Effects of Temperature and Salinity on the Survival and Growth of the Larvae of *Pandalus jordani* (Decapoda: Pandalidae) 125

U. Båmstedt
Reproductive Bioenergetics Within the Summer and Winter Generations of *Euchaeta norvegica* (Copepoda) 135

F. Møhlenberg, H. U. Riisgård
Filtration Rate, Using a New Indirect Technique, in Thirteen Species of Suspension-Feeding Bivalves 143

V. Brock
Habitat Selection of Two Congeneric Bivalves, *Cardium edule* and *C. glaucum* in Sympatric and Allopatric Populations 149

N. E. Buroker, W. K. Hershberger, K. K. Chew
Population Genetics of the Family Ostreidae. I. Intraspecific Studies of *Crassostrea gigas* and *Saccostrea commercialis* 157

N. E. Buroker, W. K. Hershberger, K. K. Chew
Population Genetics of the Family Ostreidae. II. Interspecific Studies of the Genera *Crassostrea* and *Saccostrea* 171

R. S. Blanquet, J. C. Nevenzel, A. A. Benson
Acetate Incorporation into the Lipids of the Anemone *Anthopleura elegantissima* and Its Associated Zooxanthellae 185

Volume 54 Number 3 1979

A. Hall, A. H. Fielding, M. Butler
Mechanisms of Copper Tolerance in the Marine Fouling Alga *Ectocarpus siliculosus* – Evidence for an Exclusion Mechanism 195

L. Cheng, P. J. Franco, M. Schulz-Baldes
Heavy Metals in the Sea-Skater *Halobates robustus* from the Galápagos Islands: Concentrations in Nature and Uptake Experiments, with Special Reference to Cadmium 201

D. Hedgecock
Biochemical Genetic Variation and Evidence of Speciation in Chthamalus Barnacles of the Tropical Eastern Pacific Ocean 207

F. E. Round
Occurrence and Rhythmic Behaviour of *Tropidoneis lepidoptera* in the Epipelon of Barnstable Harbor, Massachusetts, USA 215

F. E. Round
A Diatom Assemblage Living Below the Surface of Intertidal Sand Flats 219

K. Reise, P. Ax
A Meiofaunal "Thiobios" Limited to the Anaerobic Sulfide System of Marine Sand Does Not Exist 225

K.-L. Schiedges
Reproductive Biology and Ontogenesis in the Polychaete Genus *Autolytus* (Annelida: Syllidae): Observations on Laboratory-Cultured Individuals 239

L. M. D'Apolito, S. E. Stancyk
Population Dynamics of *Euterpina acutifrons* (Copepoda: Harpacticoida) from North Inlet, South Carolina, with Reference to Dimorphic Males 251

D. A. Jones, A. Kanazawa, K. Ono
Studies on the Nutritional Requirements of the Larval Stages of *Penaeus japonicus* Using Microencapsulated Diets 261

N. A. Sloan
Microhabitat and Resource Utilization in Cryptic Rocky Intertidal Echinoderms at Aldabra Atoll, Seychelles 269

R. E. Brock, C. Lewis, R. C. Wass
Stability and Structure of a Fish Community on a Coral Patch Reef in Hawaii 281

Corrigendum Notice 292

Volume 54 Number 4 1979

L. V. Sick, C. C. Johnson, C. A. Siegfried
Fluxes of Dissolved and Particulate Calcium in Selected Tissues of *Crassostrea virginica* 293

F. B. Griffiths, J. Caperon
Description and Use of an Improved Method for Determining Estuarine Zooplankton Grazing Rates on Phytoplankton 301

G. Lopez, F. Riemann, M. Schrage
Feeding Biology of the Brackish-Water Oncholaimid Nematode *Adoncholaimus thalassophygas* 311

H. Okada, A. McIntyre
Seasonal Distribution of Modern Coccolithophores in the Western North Atlantic Ocean 319

G. R. Bilyard, A. G. Carey, Jr.
Distribution of Western Beaufort Sea Polychaetous Annelids 329

R. P. M. Bak, M. S. Engel
Distribution, Abundance and Survival of Juvenile Hermatypic Corals (Scleractinia) and the Importance of Life History Strategies in the Parent Coral Community 341

D. J. Sarver
Recruitment and Juvenile Survival in the Sea Hare *Aplysia juliana* (Gastropoda: Opisthobranchia) 353

T.-E. Chua, S.-K. Teng
Relative Growth and Production of the Estuary Grouper *Epinephelus salmoides* under Different Stocking Densities in Floating Net-Cages 363

M. B. Régis
Particularités microstructurales du squelette de *Paracentrotus lividus* et *Arbacia lixula:* Rapports avec l'écologie et l'éthologie de ces échinoïdes. [Microstructural Features of the Skeleton of *Paracentrotus lividus* and *Arbacia lixula:* Relations with the Ecology and Ethology of these Echinoids] 373

T. J. Pitcher, B. L. Partridge
Fish School Density and Volume 383

Corrigendum Notice 394

Indexed in Current Contents